 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **ZOOLOGY**

FIRST SEMESTER – APRIL 2011

# ZO 1813 - PHYLOGENY OF INVERTEBRATA AND CHORDATA

Date : 20-04-2011 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**PART-A**

(Answer **All** the questions) (10x2 = 20 Marks)

1.Write notes on

(a) Ganoid Scales (b) Down Feathers.

2.Write the Dental Formulae of the following:

(a) Man (b) Dog (c) Cat (d) Tiger.

3.Give any four Economic Importance of Invertebrates.

4.Explain the Pathogenecity of the following:

(a) *Taenia solium* (b)*Ascaris lumbricoides*

5.Give the Zoological names of the following:

(a) Garden Lizard (b) Rat (c) Shark (d) Lion

6.Define the following:

(a) Morphallaxis (b) Epimorphosis

7.Distinguish Adaptation from Adaptive Radiation.

8.Write short notes on:

(a) Air sacs (b) Flame cells.

9.Define:

(a) Nephridia (b) Sericulture.

10.Mention any four Affinities of Cephalochordates.

**PART-B**

(Answer any **Four** questions) (4x10 = 40 Marks)

11.Write a paragraph on the Larval Forms of Echinoderms.

12.Give an account of the Origin , Ancestry and Evolution of Chordates with reference to

Geological Time Scale.

13.Explain in detail the Minorphyla-Rotifera.

14.Compare and bring out the Phylogenetic significance of heart of Chordates.

15.Briefly explain the Adaptive Radiation of Birds.

16.Discuss in detail the Life Cycle of Plasmodium.

**PART-C**

(Answer any **Two** questions) (2x20 = 40 Marks)

17.Compare and contrast the Respiratory System of Invertebrates and elaborate its Phylogenetic Significance.

18.What are Ostracoderms? Classify and explain the Origin and Evolution of Ostracoderms.

19.Give an account of Apiculture.

20.Describe the following:

(a)Migration of birds (b)Affinities of Urochordates (c)Adaptive Radiation of Mammals.

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